

AMENDMENTS TO THE CLAIMS

Applicants submit below a complete listing of the current claims, including marked-up claims with insertions indicated by underlining and deletions indicated by strikeouts and/or double bracketing. This listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of Claims:

1-18. (Canceled)

19. (Canceled)

20. (Currently amended) Apparatus for delivering and sequentially implanting one or more of a plurality of sequentially positioned pellets within a patient's myocardium, the pellets comprising a therapeutic agent ~~within myocardial tissue~~, the apparatus comprising;

an elongate flexible catheter body having a proximal end and a distal end and a length and flexibility sufficient to allow for transluminal delivery, through a patient's vasculature, to a target region of the myocardium;

a delivery chamber coupled to the distal end of the catheter body and having a space for carrying the pellets and a port for sequentially releasing one or more pellets therefrom; and

an actuator coupled to the delivery chamber and capable of sequentially driving one or more of the pellets through the port,

the distal tip of the chamber being configured to be sufficiently sharp to penetrate the tissue to locate the port in the myocardial wall, whereby the one or more pellets comprising the therapeutic agent may be sequentially implanted within the myocardium.

21. (Original) Apparatus according to claim 20, further including

a control mechanism coupled to the actuator and the proximal end of the body for providing control of the actuator, whereby a user can operate the control mechanism for controlling the delivery of the therapeutic agent.

22. (Original) Apparatus according to claim 20, further including a steering mechanism for turning the distal end of the body, to thereby allow the delivery chamber to be selectively guided through a body lumen.
23. (Original) Apparatus according to claim 20, wherein the delivery chamber and the distal end of the flexible body are dimensionally adapted to allow for transluminal delivery and for entry into the interior of a patient's heart.
24. (Original) Apparatus according to claim 20, wherein the delivery chamber includes a substantially cylindrical interior housing dimensionally adapted to store in axial alignment a plurality of minispheres containing a therapeutic agent.
25. (Previously presented) Apparatus according to claim 20, wherein the distal end of the apparatus is pointed to penetrate a tissue wall.
26. (Previously presented) Apparatus according to claim 20, wherein the actuator includes a plunger for sequentially driving one or more of the pellets from the delivery chamber.
27. (Previously presented) Apparatus according to claim 20, further including a ratchet assembly for allowing sequentially delivery of discreet numbers of the pellets comprising the therapeutic agent.
28. (Original) Apparatus according to claim 20, wherein the actuator includes a threaded plunger for advancing into the delivery chamber responsive to a rotating action.
29. (Original) Apparatus according to claim 20, wherein the delivery chamber is adapted to receive at least one pellet containing the therapeutic agent.
30. (Currently Amended) Apparatus according to claim 20 21, further including a lever-action handle mounted at the proximal end of the flexible body and coupled to the control mechanism.

31. (Previously presented) Apparatus according to claim 20, where the delivery chamber has an arcuate shaped portion for facilitating implanting of a pellet comprising the therapeutic agent within a tissue wall.

32. (Previously presented) Apparatus according to claim 31, wherein the delivery chamber includes a port formed from a plurality of converging flexible fingers.

33.-38.(Canceled)